

limits, and then this will not be found to be accompanied by lameness.—*Med. Times and Gaz.*, Nov. 30, from *Gaz. des Hôpitaux*, No. 101.

46. *Dislocation of the Femur downwards and forwards, or under the Arch of the Pubes.*—Dr. E. W. HODDER, surgeon to the Toronto Hospital, records (*British American Journal*, March, 1861) a case of this very rare if not unique dislocation. The subject of it was a muscular man, æt. 22, upon whom a mass of earth fell whilst engaged in excavating a bank, at 6 P. M., Jan. 15, 1855. He was first struck on the shoulders, by which he was knocked down, and a large quantity of the earth afterwards fell upon his loins and upper part of his thigh whilst he was attempting to escape. He was brought to the hospital an hour after the accident. He then complained of great pain in the right thigh and in the region of the right hip-joint. The singular position of the limb at once attracted Dr. H.'s attention, and on making a very careful examination, "it was found that the head of the femur had been thrown downwards and inwards, completely under the arch of the pubes, the neck of the bone resting on the ramus of the pubis immediately below the origin of the gracilis muscle, and either between or through the origins of the adductors.

"When supported in the upright position, the thigh formed very nearly a right angle with the trunk, the knee being as high as the head of the bone, the leg was at a right angle with the thigh, the knee turned very much outwards, the toes turned slightly outwards and pointed downwards. When he was allowed to place himself in the position which gave him the least pain whilst standing on the sound limb, the trunk became much bent forward, the knee consequently less raised. The trochanter major could scarcely be felt, but was anterior and much below its normal position, and thrown inwards towards the mesian line of the body. One of the most striking symptoms in the case, was a remarkable concavity below the dorsum ilii, caused by the absence of the great trochanter, and by the gluteus maximus, as well as the medius and minimus, being put so much upon the stretch as to render the bodies of these muscles quite flat, instead of presenting their ordinary rounded form.

"On examining the perineum and tracing the ramus of the ischium from the tuberosity upwards, a firm round projection could be felt at about the junction of the ischium and pubis. This projection was anterior to and rested upon the ramus of the ischium, and it was found to move when the leg was rotated together with the trochanter. The psoas and iliacus muscles could also be felt very much upon the stretch.

"When the patient was examined in the recumbent position the thigh was less flexed upon the abdomen, but it was more turned outwards than in the upright position. On measuring from the anterior-superior spinous process of the ilium to the upper edge of the patella, the length of the two limbs was nearly the same, the injured leg, if anything, being the longest, but the distance from the same point of the ilium to the trochanter on the two sides, showed a remarkable difference, the trochanter of the injured limb being fully two inches further removed, and to the inner and under side."

The next day at noon, the symptoms remaining nearly the same, the reduction was determined on.

"The man was placed upon a table in the recumbent position; chloroform was then administered until perfect anæsthesia was produced. A strong belt was passed round the pelvis, on the same plane as the body, for counter extension, and the pulleys were applied at nearly right angles to the vertical plane of the body, but a little inclined downwards; a round towel was also used for the purpose of dislodging the head of the femur from under the ramus of the ischium and pubis. Extension was now commenced and cautiously continued for some minutes, the muscles being extremely tense and rigid.

"The ankle was grasped by an assistant and the leg drawn towards the mesian plane. After the extension had been continued for about fifteen or twenty minutes, and the round towel used to dislodge the head of the bone, a hard grating sound was heard, followed by an indistinct snap. The force was immediately relaxed and a careful examination again made, when it was found that the head of the femur now no longer occupied the former situation under the

pubes, but that the accident had been converted into a dislocation into the foramen ovale presenting all the characteristics.

"The pelvis strap and pulleys were again readjusted, but the direction of the force was now more upwards and outwards, the ankle held by the assistant was drawn under the other and at the same time rotated, and in a few minutes the head of the bone was felt to move, and almost immediately afterwards slipped into the cotyloid cavity, with the same grating sound as when it was dislodged from under the arch of the pubes. This sound more resembled that produced by the laceration of muscular and tendinous structures than the clear snap generally heard on the reduction of a dislocated bone.

"The force required was considerable, but the patient was well under the influence of chloroform during the whole time, except at the close; and when the luxation was reduced he immediately exclaimed that the bone was in its right place and expressed himself greatly relieved.

"His legs were bound together and he was placed in bed. From this time until the 5th day of February not a single bad symptom presented itself; he gradually recovered the use of his limb, and on the day of his discharge (5th Feb.) he was able to walk very well with the use of a stick."

47. *Dislocation of the Head of the Femur into the Obturator Foramen, with Preservation of the Movements of the Bone.*—Professor SÉDILLOT, of Strasburg, has communicated a highly interesting paper to the French Academy of Sciences, on the subject of the immediate preservation of the movements of the inferior extremity in cases of accidental displacement of the head of the femur into the obturator or thyroid foramen. The difficulty or absolute impossibility of the movements of the limb has invariably been considered as the most constant symptom of recent dislocations, especially in diarthrodial joints. It seems indeed difficult to imagine how a bone extruded by some violent effort from its articular cavity, an injury necessarily involving laceration of the ligaments, muscular tension, and changes in the natural position and direction of the limb, can possibly still allow of motion, so painless and extensive as not to interfere materially with the functions of the extremity. Surgeons, therefore, have neither surmised nor admitted that a patient, suffering from dislocation, may uninterruptedly pursue his usual avocations as if he had merely undergone some slight contusion. Instances of the kind exist, however, and are deserving of notice, inasmuch as they may induce a dangerous degree of security, and lead to disastrous errors of diagnosis.

This is the object of M. Sédillot's paper, and, in support of his views, the author adduces several cases of luxation of the femur forward and downward, in which the patients were nevertheless able to walk immediately after the occurrence of the accident, and to exercise as usual, without much pain or lameness. It is, moreover, for the purpose of cautioning the practitioner against an error which might readily be fallen into in such cases, that M. Sédillot enlarges on these circumstances which have not hitherto been pointed out. When the attention of the observer is led astray by the absence of any marked difficulty of locomotion, the gravity of the injury may easily escape detection, and a minute examination of the relative changes of situation of the pelvis and femur may appear unnecessary in consequence of the apparent unimportance of the symptoms. The persistency of the movements and functions of the limb, says M. Sédillot, is accounted for by the fulcrum afforded to the head of the femur by the depth and shape of the margin of the obturator foramen. Despite the immediate and spontaneous restoration of the power of using the extremity for the purposes of progression, the leading features of the displacement are nevertheless perfectly discernible, as may be seen in the instance of a young soldier who was admitted into the hospital of Strasburg for a lameness of obscure origin, which had even been suspected of being simulated. M. Sédillot relates the case as follows:—

*Case.* G. P——, æt. 18, a private in the 4th rifles, fell while in a boat, on the 6th of October, 1860, but was unable to give any account of the circumstances which accompanied his fall. The patient continued to walk, but observed, three